

STUDIES IN BIGNONIACEAE 18:  
NOTES ON S. MOORE'S MATO GROSSO BIGNONIACEAE<sup>1</sup>

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ABSTRACT

The 16 species of Bignoniaceae described by Moore from his own and Robert's Mato Grosso collections are identified. Three new combinations based on Moore's species are made.

In preparation for the treatment of Bignoniaceae for Flora Neotropica I am attempting to identify the numerous, unaccounted-for species described in *Bignonia* prior to 1900. Spencer Moore's Mato Grosso Bignoniaceae are among the most important of these. In 1895 Moore (1895) described 14 new species of Bignoniaceae collected during the Percy Sladen Mato Grosso Expedition of 1891–1892. Later (Moore 1904, 1907) he described two additional species of Bignoniaceae from the same area. Moore's species, described mostly in the genus *Bignonia*, have never been reinterpreted nor identified with known species of Bignoniaceae. The holotypes of Moore's collections are maintained in the herbarium of the British Museum of Natural History (BM); there are also partial sets at NY and MO. Through the kindness of the curator of the British Museum's Botany Department, I have been able to examine the holotypes of these plants. This paper identifies them to genus and species and proposes the three necessary new combinations based on Moore's names. Moore's other 13 species are reduced to synonymy.

The nomenclatural significance of Moore's species is due to the fact that they were published just prior to Bureau & Schumann's (1896–1897) treatment of Bignoniaceae for Flora Brasiliensis. Published too late for inclusion in Flora Brasiliensis, these names have priority over those published in that work and subsequently. A few of Moore's plants were identified in the Flora Brasiliensis on the basis of the distributed specimens, however. The following 16 species of Bignoniaceae were described by Moore.

1. ***Bignonia rubescens*** S. Moore is *Arrabidaea chica* (H. & B.) Verl. (based on *B. chica* H.&B., Pl. Aeq. 1: 107, tab. 31. 1808.) as noted by Bureau & Schumann (as *B. erubescens*).
2. ***Bignonia tomentella*** S. Moore is *Arrabidaea pubescens* (L.) A. Gentry (based on *B. pubescens* L., Sp. Pl., ed. 2, 2: 870. 1763.) and falls into the synonymy of that species.
3. ***Bignonia grewioides*** S. Moore is *Arrabidaea fagoides* (Cham.) Bur. (based on *B. fagoides* Cham., Linnaea 7: 680. 1832.) and becomes a synonym of that species which is itself uncomfortably close to *A. platyphylla* DC.
4. ***Bignonia melioides*** S. Moore is *Pleonotoma brittonii* Rusby (Bull. Torrey Bot. Club 27: 72. 1900.) and Moore's name is older. The new combination **Pleono-**

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**toma melioides** (S. Moore) A. Gentry (based on *B. melioides* S. Moore, Trans. Linn. Soc. London, Bot. 4: 414. 1895.) is necessary.

5. **Bignonia caudigera** S. Moore is *Arrabidaea coleocalyx* Bur. & K. Schum. (Fl. Bras. 8(2): 35. 1896.) and Moore's name is older. The new combination **Arrabidaea caudigera** (S. Moore) A. Gentry (based on *B. caudigera* S. Moore, Trans. Linn. Soc. London, Bot. 4: 415. 1895.) is necessary for this well-known species.

6. **Bignonia modesta** S. Moore is a species of *Stizophyllum* and Sandwith has annotated the type as *S. riparium* (H.B.K.) Sandw. sensu lato. Moore's plant differs from other specimens of *S. riparium* seen by me in its smaller serrulate leaflets. It differs from *S. perforatum* (Cham.) Miers in less noticeable pubescence, smaller serrulate leaflets, and especially the smaller uninflated calyx. The pink flower color agrees with *S. perforatum* or *S. inaequilaterum* Bur. & K. Schum. but not *S. riparium* sensu stricto. Species limits in *Stizophyllum* are hazy at best and only additional collections from Mato Grosso can tell whether *B. modesta* should be regarded as specifically distinct. For the present it may be tentatively included under *S. riparium*.

7. **Macfadyena riparia** S. Moore is a form of *Phryganocydia corymbosa* (Vent.) Bur. ex K. Schum. (based on *Spathodea corymbosa* Vent., Choix tab. 40. 1807.) and becomes a synonym of that species. The predominantly simple leaves of Moore's plant are insufficient grounds for species segregation.

8. **Macfadyena bipinnata** S. Moore is an otherwise undescribed species of *Memora*. The new combination **Memora bipinnata** (S. Moore) A. Gentry (based on *Macfadyena bipinnata* S. Moore, Trans. Linn. Soc. London, Bot. 4: 418. 1895.) is necessary for this plant which is amply distinguished by its softly puberulous leaves with relatively large leaflets and lack of foliaceous pseudostipules. A second collection of this species is *Prance et al. 18906* from the Chapada dos Guimarães, cerrado behind Colegio de Buriti, Mato Grosso. It differs from the type in simply pinnate leaves but is otherwise a good match. *Memora axillaris* Bur. & K. Schum. (a simply pinnate leaved species with foliaceous pseudostipules and a very different pubescence texture) may be the closest relative of *M. bipinnata*; *M. axillaris* is younger than Moore's basionym and would become a junior synonym should the two be united.

9. **Macfadyena pubescens** S. Moore is *Macfadyena mollis* (Sonder) Seem. (based on *Spathodea mollis* Sonder, Linnaea 22: 561. 1849.) which is itself synonymous with *Macfadyena hispida* (DC.) Seem. (based on *Spathodea hispida* DC., Prodr. 9: 205. 1845.). Seemann (1863) followed by Fabris (1965) separated *M. mollis* and *M. hispida* on what I consider tenuous grounds. In either case Moore's plant falls into synonymy.

10. **Adenocalymma croceum** S. Moore is *Adenocalymma bracteolatum* DC. (Prodr. 9: 200. 1845.) and becomes a synonym of that species. The only known fruiting collection of *A. bracteolatum* was collected by Roberts and identified by Moore with his *A. croceum*. This collection contains two immature capsules which

are oblong, obtuse at base and apex, 13–14 cm long, 2–2.2 cm wide, minutely lepidote, otherwise glabrous, drying dark with numerous pale lenticels, and somewhat flattened in drying but probably subterete when fresh. The unwinged fruit of *A. bracteolatum* proves that the more widespread and closely related *Adenocalymma* with winged fruits is not synonymous with this species and must be known as *A. purpurascens* Rusby (see Gentry, 1976). The ovary of Moore's collection agrees with that of the type of *A. bracteolatum* in being linear-oblong without lateral ridges, unlike the 4-ridged ovary of *A. purpurascens*.

11. **Anemopaegma brevipes** S. Moore is closely related to the earlier *A. flavum* Morong (Ann. New York Acad. Sci. 7: 188. 1893.) on account of its glabrous corolla tube and foliaceous pseudostipules. It appears to be distinct by its much denser pubescence, especially on the lower leaflet surface. I would tentatively assign a second collection to *A. brevipes*. This is *Pirres & Leite 14692* (MO) from Roraima Territory. Its only noticeable difference is a more strongly bracteate less pubescent inflorescence, although its geographic disjunction is rather striking. While *Anemopaegma chrysoleucum* (H. B. K.) Sandw., *A. flavum*, and *A. brevipes* are clearly related and form a series subdivided mostly by increasing pubescence, they seem to be specifically distinct. The New York "isotype" of *A. brevipes* is actually *A. flavum*, however. *Anemopaegma bifarium* Bur. & K. Schum. (Fl. Bras. 8(2): 124. 1896.) is based on Moore's collection, but Moore's name is older.

12. **Anemopaegma decorum** S. Moore is *Clytostoma decorum* Bur. & K. Schum. (Fl. Bras. 8(2): 1896.). Although Bureau & Schumann had not seen Moore's description, they saw a duplicate of his collection and redescribed the species in its correct genus. Moore's description is older than Bureau & Schumann's but *C. decorum* Bur. & K. Schum. blocks a combination in *Clytostoma* based on *A. decorum* S. Moore.

13. **Anemopaegma sylvestre** S. Moore is *Anemopaegma flavum* Morong (Ann. New York Acad. Sci. 7: 188. 1893.) and becomes a synonym of the latter.

14. **Tabebuia chapadensis** S. Moore is *Arrabidaea corallina* (Jacq.) Sandw. (based on *Bignonia corallina* Jacq., Fragm. Bot. 37, tab. 42, fig. 1. 1800–1809.) and has already been placed in the synonymy of that species (Gentry, 1973).

15. **Cremastus sanctae-annae** S. Moore (1904) is *Arrabidaea sceptrum* (Cham.) Sandw. (based on *Bignonia sceptrum* Cham., Linnaea 7: 710. 1832.). Sandwith (1968) suggested that *C. sanctae-annae* was probably a large-calyx form of *A. pulchra* (Cham.) Sandw., noting especially the agreement of its open pyramidal inflorescence with that of *A. pulchra*. I am hard pressed to distinguish *A. pulchra* from *A. sceptrum*; certainly the latter's inflorescence shows every kind of gradation from open to condensed. If *A. pulchra* is to be separated from *A. sceptrum*, its smaller calyx is the key character and the large calyx of *C. sanctae-annae* clearly allies it with the latter.

16. **Jacaranda robertii** S. Moore (1907) proves to be *J. decurrens* Cham. contrary to my earlier (Gentry, 1974) interpretation. The BM holotype of *J. robertii* (*Roberts 675*) is completely different from the MO "isotype" with the same col-

lection number. The holotype is clearly *J. decurrens*. The "isotype" is an undescribed species mixed with corollas of *J. decurrens*. The numerous discrepancies I previously noted between the MO specimen of *Roberts 675* and Moore's description are thus explained: except for the corollas we were looking at two quite unrelated plants. The MO specimen of *Roberts 675* has only vegetative parts, calyces, and very immature fruits of the new species, inadequate for its description at the present time.

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